ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. #721780- & 721790-
STP00-0114-01(084) &
STP00-0114-01(085)
GDOT District 7 - Metro Atlanta
Fulton County
SR 9 Operational Improvements

OFFICE Design Policy & Support

DATE May 5, 2011

FROM for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED CONCEPT REPORT**

Attached is the approved Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Genetha Rice-Singleton, Program Control Administrator
Bobby Hilliard, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Angela Robinson, Financial Management Administrator
Glenn Bowman, State Environmental Administrator
Kathy Zahul, State Traffic Engineer
Georgene Geary, State Materials & Research Engineer
Ron Wishon, State Project Review Engineer
Jeff Baker, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
Bryant Poole, District Engineer
Scott Lee, District Preconstruction Engineer
Jonathan Walker, District Utilities Engineer
Peter Emmanuel, Project Manager
BOARD MEMBER - 6th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
PROJECT CONCEPT REPORT

Project Number: STP00-0114-01(084) & STP00-0114-01(085)
County: Fulton
P. I. Number: 721780- & 721790-

Federal Route Number: N/A
State Route Number: 9

Project Description:

PI 721780-, STP00-0114-01(084) - This roadway capacity project will widen SR 9/North Main Street from Academy Street to Windward Parkway to a continuous four lane roadway separated by raised median for a total project length of 1.97 miles.

PI 721790-, STP00-0114-01(085) - This operational improvements project will reconstruct SR 9/South Main Street from Upper Hembree Road to Academy Street to a continuous four lane roadway separated by raised median for a total project length of 1.70 miles.

Submitted for approval:

DATE 9/27/10 — Kevin Shin PBND & Co.
Design Consultant Name and Firm Name

DATE 9/27/10 — [signature]
Office Head (Project Manager's Office)

DATE 9/27/10 — [signature]
Project Manager

Recommendation for approval:

DATE _____ — _____
State Utilities Engineer

DATE 12/16/10 — Genetha Rice-Singleton *
Program Control Administrator

DATE 11/1/10 — Glenn Bowman *
State Environmental Administrator

DATE 10/22/10 — Kathy Zahul *
State Traffic Engineer

DATE 10/22/10 — Ron Wishon *
Project Review Engineer

DATE _____ — _____
District Engineer

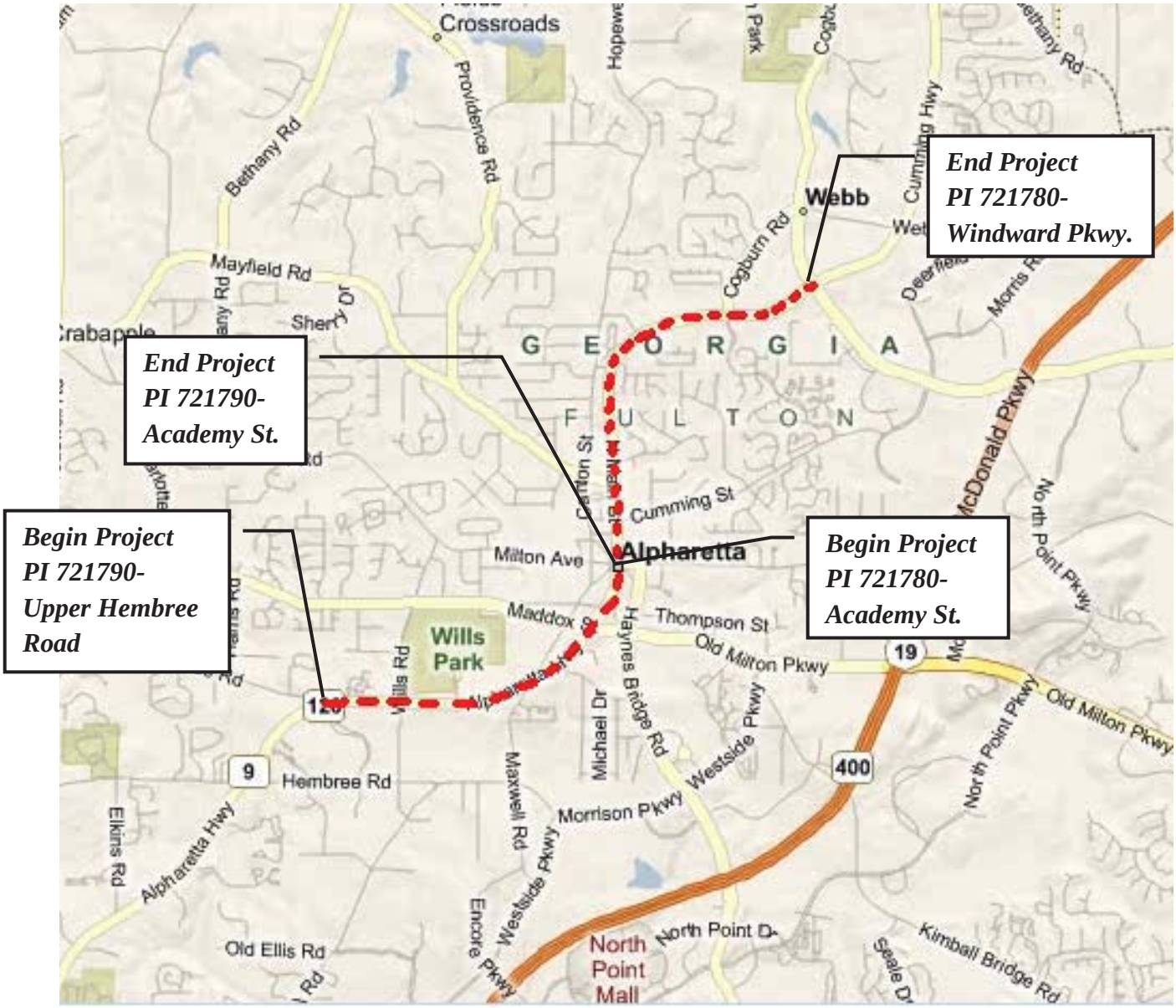
DATE _____ — _____
State Transportation Financial Management Administrator

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

DATE 10/27/10 — Angela Alexander *
State Transportation Planning Administrator

* Recommendation on File. KKF

LOCATION SKETCH (not to scale)



Project Numbers: STP00-0114-01(084), PI 721780- and STP00-0114-01(085), PI 721790-

NEED AND PURPOSE
PROJECT NUMBER STP00-0114-01(084), STP00-0114-01(085)
P.I. NUMBER: P.I. # 721780, 721790
SR 9 FROM UPPER HEMBREE ROAD TO WINDWARD PARKWAY.
FULTON COUNTY.

BACKGROUND.

SR 9, is a major north-south roadway that not only links the cities of Sandy Springs, Roswell, Alpharetta, and Milton, it also provides access from Forsyth and north Fulton County to I-285 and downtown Atlanta. SR 9 is also the major arterial that runs parallel to GA 400. With the increasing population growth in northern part of Fulton County over the last twenty years and especially in the last ten years, SR 9 has become a major transportation corridor for vehicles traveling on and off of SR 400. The population within the City of Alpharetta has grown from 3,000 to over 50,000 since 1981. The abundance of shopping centers, office complexes, commercial businesses and schools within the city cause the population to swell to over 120,000 people during the work day. Also, the 167-bed acute care community hospital, North Fulton Regional Hospital is located on SR 9 (Main Street) just within the adjacent Roswell city limits, near the southern terminus. As a result of the recent growth, and combined with close proximity of four SR 400 interchanges, the existing roadway network has struggled to handle the travel on SR 9.

These proposed SR 9 projects, PI 721780 and 721790 are included in the Atlanta Regional Transportation plan (RTP), the Metropolitan Planning Organization (MPO) for the project area. The project corridor is identified as a bicycle/pedestrian route in the Fulton County Comprehensive Plan and the 2007 MPO bicycle and pedestrian plan.

NEED AND PURPOSE

The need is to alleviate traffic congestion along SR 9 to accommodate existing and future travel demand and to reduce crash frequency and severity along the corridor. Crash rates along the corridor are above the statewide average for comparable route types, and the level of service is “D” or worse for 2040 (Design year).

EXISTING CONDITIONS

SR 9 is functionally classified as an Urban Principal Arterial starting at SR 9/Upper Hembree intersection for approximately 1.85 miles to approximately 0.16 miles south of SR 9/Cumming street intersection where it changes to an Urban Minor Arterial. The functional classification is an Urban Minor Arterial from Cumming Street to the SR 9/Windward Parkway intersection (northern terminus). Currently, there are four different typical sections: a five-lane section with flush median, a four-lane section, a three-lane section and a two-lane section.

EXISTING AND PROJECTED TRAFFIC VOLUMES

The current (2008) Average Annual Daily Traffic (AADT) on SR 9 ranges between 34,600 at the southern end and 25,150 near the SR 9/Old Milton Parkway/Academy street intersection to 24,860 at the northern end. The level of service (LOS) ranges from "D" at the southern end to "B" at the SR 9/Old Milton Parkway/Academy Street intersection and "C" at the northern end. The (2040) traffic volumes are projected to be 44,160 AADT, providing for LOS "E" at the southern end where the typical section is 4 lanes and "C" near the SR 9/Old Milton Parkway/Academy street intersection. At the northern end with projected 31,730 AADT and typical section of 2 lanes, the LOS is projected to be "E". Table 1 presents traffic volume and LOS data for roadway segments for the existing year (2008), opening year (2020), and design year (2040).

Table 1. Traffic Volumes and Level of Service for Roadway Segments Existing and Future No Build Conditions

Road Segment SR 9	Existing Year (2008) Condition		Opening Year (2020) Condition		Design Year (2040) Condition	
	AADT*	LOS	AADT	LOS	AADT	LOS
Upper Hembree Rd./ North meadow Pkwy. (Beginning Terminus) to Wills Rd.	34,600	D	36,190	D	44,160	E
Wills Rd. to Maxwell Rd.	32,755	C	34,260	C	41,805	E
Maxwell Rd. to Roswell St./Devore Rd.	33,980	C	35,550	D	43,380	E
Roswell St. /Devore Rd. to Old Milton Pkwy.	32,770	C	34,285	C	41,830	E
Old Milton Pkwy. to Milton Ave./Academy St.	25,150	B	26,305	B	32,100	C
Milton Ave./Academy St. to Cumming St.	34,565	D	36,155	D	44,120	E
Cumming St. to Mayfield Rd.	29,805	C	31,180	C	38,050	D
Mayfield Rd. to Cogburn Rd./Henderson Village Pkwy.	27,190	D	28,445	D	34,710	E
Cogburn Rd. /Henderson Village Pkwy. to Windward Pkwy (Ending Terminus)	24,860	C	26,005	C	31,730	E

CRASH DATA

The crash rate on the Urban Principal Arterial section of SR 9 is higher than the statewide average from 2007 to 2009. The statewide average crash rates in 2009, 2008 and 2007 for Urban Principal Arterial that is Non-Freeway, Non-National Highway System was 603, 612 and 649 crashes per 100 million vehicle miles traveled, respectively, and the corridor crash rates were 718, 753 and 937 crashes per 100 million vehicle miles traveled. There were a total of 507 crashes during this period and 34.12 % of these crashes involved injuries. There were no fatalities from 2007 to 2009.

Approximately 10 % of the total crashes on the Urban Principal Arterial section of SR 9 occurred at the intersection of SR 9 with Roswell Street and 10 % occurred at the intersection with Devore Road. In 2009, out of the 148 crashes that occurred within this segment, 73 (49 %) were Rear End crashes and 47 (32 %) were Angle crashes.

In 2008, out of the 160 crashes that occurred along the Urban Principal Arterial section of SR 9, 16 (10 %) of the crashes occurred at the intersection of SR-9 and Upper Hembree Road. Sixty-Eight (42 %) of the 160 crashes were Rear End, 59 (37 %) were Angle and 15 (9 %) were Sideswipe Same Direction crashes.

In 2007, out of the 199 crashes that occurred along SR 9 within the same section, 35 (18 %) occurred at the intersection of SR-9 and Church Street. Ninety-six (48 %) of the 199 crashes were Rear End, 62 (31 %) were Angle crashes and 19 (10 %) were Sideswipe Same Direction crashes.

Table 2 – Urban Principal Arterial Road Crash Summary (mile post 23.11-24.96)

	2007	2008	2009
Total Accidents	199	160	148
Accidents Per 100 MVMT	937	753	718
Statewide Accidents Per 100 MVMT	649	612	603

Table 3 -Urban Principal Arterial Road Crash Summary by Manner of Collision

			Manner of Collision						
Year	Injury	Fatal	Angle	Head On	Rear End	Sideswipe - Same Direction	Sideswipe - Opposite Direction	Not a Collision with a Vehicle)	Total Crashes
2007	85	0	62	4	96	19	9	9	199
2008	40	0	59	5	68	15	5	8	160
2009	48	0	47	2	73	11	11	4	148
Total	173	0	168	11	237	45	25	21	507

The statewide average crash rates for 2009, 2008 and 2007 for an Urban Minor Arterial were 463, 469 and 513 crashes per 100 million vehicle miles traveled and the corridor crash rates were 599, 599 and 824 crashes per 100 million vehicle miles traveled. There were 98 crashes within this segment during 2009, out of which 16 (16 %) were crashes with injuries. In 2008, 23 (23 %) of the 101 crashes that occurred were crashes with injuries whereas in 2007, 53 (38 %) of the 139 crashes that occurred were crashes with injuries. There were no fatalities in 2009, 2008 or 2007.

A total of 338 crashes occurred along the 1.82 mile section of Urban Minor Arterial along SR 9. In 2009, out of the 98 crashes that occurred within this segment, 63 (64 %) of the crashes were Rear End, 23 (23 %) crashes were Angle crashes and the rest included 2 Head on crashes, 5 Not a collision with a vehicle crashes and 3 Sideswipe Same Direction crashes.

In 2008, 65 (64 %) of the 101 crashes were Rear End crashes and 20 (20 %) were Angle crashes. Whereas in 2007, 94 (68 %) of the 139 crashes that occurred were Rear End crashes, 33 (24 %) of the crashes were Angle crashes, and the rest included 3 Head on crashes, 1 Not a collision with vehicle crashes and 5 Sideswipe Same Direction crashes.

Table 4 – Urban Minor Arterial Street Crash Summary (mile post 24.96-26.78)

	2007	2008	2009
Total Accidents	139	101	98
Accidents Per 100 MVMT	824	599	599
Statewide Accidents Per 100 MVMT	513	469	463

Table 5-Urban Minor Arterial Street Crash Summary by Manner of Collision

			Manner of Collision						
Year	Injury	Fatal	Angle	Head On	Rear End	Sideswipe - Same Direction	Sideswipe - Opposite Direction	Not a Collision with a Vehicle)	Total Crashes
2007	53	0	33	3	94	5	3	1	139
2008	23	0	20	1	65	10	2	3	101
2009	16	0	23	2	63	3	2	5	98
Total	92	0	76	6	222	18	7	9	338

LOGICAL TERMINI

The northern terminus is logical because it would tie into proposed project CSSTP-0007-00(838), PI # 0007838, (SR 9/Cumming Highway from Windward Parkway to Forsyth County line). This project is proposed to widen SR 9 (2 to 4 lanes) from Windward Parkway to the Forsyth County line.

Ideally, the existing 4 lane section at Upper Hembree Road in Alpharetta would be a logical terminus; however, the southern terminus does not demonstrate logical termini because of the projected LOS of "E" just south of the southern terminus for the design year (2040). In order to demonstrate logical termini, the southern terminus may be Long Island Drive approximately 14.35 miles south of Upper Hembree Road where the projected LOS improves to an acceptable Level of Service "C". Discussions between Offices of Environmental Services and FHWA will be needed to define the actual southern terminus.

OTHER PLANNED PROJECTS IN THE AREA

There are two other projects in the area. The first project is P.I # 0006727 (SR 9/Roswell Road from Abernathy Road to Forsyth County line). This project is proposed to install Intelligent Transportation System (ITS) elements along SR 9 from Abernathy Road to the Forsyth County line. The second project is PI # 0007838, (SR 9/Cumming Highway from Windward Parkway to Forsyth County line. This project is proposed to widen SR 9 (2 to 4 lanes) from Windward Parkway to the Forsyth County line. This project is located near the north terminus of the proposed project limit.

LAND USE

The project is located in a moderately dense, highly developed area within the City of Alpharetta. The primary land use along SR 9 within the study area is business/commercial. Single-family, residential development exists beyond the business/commercial development that fronts SR 9.

Major land use destinations with proximity to the project area include North Point Mall, North Fulton Regional Hospital, Milton High School, and downtown Alpharetta and City Hall. Public facilities and Parks located nearby include Hembree Park, Wills Park and Equestrian Center, and the Alpharetta Community Center.

According to the City of Alpharetta's Comprehensive Plan, the future land use of this corridor is designated "Central Business District", "Retail Sales and Services", and "Professional Offices".

DESCRIPTION OF THE PROPOSED PROJECT:

The proposed twin projects would widen the existing SR 9 from Upper Hembree Road to Windward Parkway in Fulton County to a continuous four lane roadway separated by a variable width median. Besides widening, the proposed projects consists of the reconfiguration of side roads, addition of pedestrian and bicycle facilities, traffic and operational improvements, signal upgrades, and addition of raised medians. The work is divided into two projects.

Project STP00-0114-01(085), PI 721790 begins at Upper Hembree Rd and continues to Academy Street. The existing SR 9/South Main Street roadway from Upper Hembree Rd/Northmeadow Pkwy intersection to the Fulton County School Bus Access is a five-lane urban section (including 12-foot travel lanes and a 14-foot flush median) with intermittent sidewalks. From the Fulton County School Bus Access to Maxwell Road intersection, the existing SR 9 is a four-lane section (with eleven foot travel lanes and minimal flush median) with intermittent sidewalks. From Maxwell Road/Roswell Street intersection to Academy Street/Milton Avenue intersection, the existing SR 9 is a four-lane section (two 11-foot northbound lanes and two 11-foot southbound lanes) with intermittent sidewalks.

Project STP00-0114-01(085) would reconstruct SR 9 to a continuous four-lane urban roadway (two lanes in each direction) separated by raised median. The primary typical section would consist of four 11-foot travel lanes (two in each direction), 4-foot bicycle lanes, a 17-foot maximum width raised (grassed) median and 11 ½ -foot minimum urban shoulders (with 5-foot sidewalks and variable landscape strip). The traffic signals at the intersections of SR 9 at Upper Hembree Rd/Northmeadow Pkwy, Wills Road, Roswell St/Maxwell Rd, Old Milton Pkwy, and Academy Street/Milton Avenue will be upgraded. A new traffic signal will be added to the intersection of SR 9 at Relocated Roswell Street/Devore Road. The four side roads: Brady Place, Maxwell Street, Roswell Street and Devore Road will be reconstructed to meet SR 9 at 90 degrees. Left and right turn lanes will be provided at all major intersections. The length of the proposed project is 1.70 miles.

Project STP00-0114-01(084), PI 721780 begins where project STP00-0114-01(085) ends at Academy Street and continues to Windward Pkwy. The existing SR 9/North Main Street roadway from Academy St/Milton Avenue intersection to the Mayfield Road intersection is a four-lane section (two 11-foot southbound lanes and two 11-foot northbound lanes) with intermittent sidewalks. As the inside northbound lane approaches Mayfield Road, it becomes a left turn only lane, leaving one northbound lane. From Mayfield Road intersection to Canton Street, the existing SR 9 is a four-lane section (one northbound 12-foot lane, two southbound 12-foot lanes, and a center turn lane), with intermittent sidewalk. From Canton Street intersection to Windward Parkway intersection, the existing SR 9 is a two-lane section (one 12-foot lane in each direction, as well as right and left turn lane at certain intersections) with intermittent sidewalks.

Project STP00-0114-01(084) would widen SR 9 to a continuous four-lane urban roadway (two lanes in each direction) separated by raised median. The primary typical section would consist of four 11-foot travel lanes (two in each direction), 4-foot bicycle lanes, a 17-foot maximum width raised (grassed) median and 11 ½ -foot minimum urban outside shoulders (with 5-foot sidewalks and variable landscape strip). The traffic signals at the intersection of SR 9 at Cumming Street, Mayfield Road, Henderson Village Pkwy/Cogburn Road, Lowe’s Shopping Center, and

Windward Parkway will be upgraded. Where warranted, new signal will be added to any unsignalized intersection. Left and right turn lanes will be provided at all major intersections. The length of the proposed project is 1.97 miles.

Median openings are proposed at the following 17 locations: Upper Hembree Rd/Northmeadow Pkwy, Cambridge Square, Wills Rd, unnamed side road at Fulton County School Bus Access, Roswell St/Maxwell Rd, Devore Rd/realigned Roswell St, Old Milton Pkwy/Maddox St, Academy St/Milton Ave, Cumming St, Mayfield Rd, medical complex, Canton St, Vaughn Dr, Water Oak Place, Henderson Village Pkwy/Cogburn Rd, Lowe's Shopping Center, and Windward Pkwy. Where warranted and practical, additional median openings will be provided on SR 9/Main Street.

The existing right-of-way on SR 9 is approximately 80 to 110 feet. Between 12 to 46 feet of additional right-of-way would be required for a total right-of-way width of 126 feet.

Is the project located in a PM 2.5 Non-attainment area? __X__ Yes _____ No

Is this project located in an Ozone Non-attainment area? __X__ Yes _____ No

The "conforming plans model description" is as follows (see Attachment 16):
721780- (FN-067A) – SR 9 (North Main Street/Cumming Highway) from Academy Street to Windward Parkway, project length of 1.97 miles, widening from 2 to 4 lanes, opening year 2030, service type programmed is General Purpose Roadway Capacity. Note: only half of the proposed project is adding capacity from 2 to 4 lanes.

721790- (FN-067B) – SR 9 (South Main Street) from Upper Hembree Road to Academy Street, project length of 1.7 miles, widening from 4 to 4 lanes, opening year 2030, service type programmed is Safety & Operational Improvements.

PDP Classification: Major __X__ Minor_____

Federal Oversight: Full Oversight ( ) Exempt (X) State Funded ( ) or Other ( )

Functional Classification:

S.R. 9/South Main St from Upper Hembree Rd to Old Milton Pkwy – Urban Principal Arterial
S.R. 9/North Main St from Old Milton Pkwy to Windward Pkwy – Urban Minor Arterial

The other side roads functional classifications are listed on Table 3.

Table 3. Functional Classification		
Urban Arterial	**Urban Collector Street**	**Urban Local Street**
SR 9/Main Street	Academy Street	Upper Hembree Road
SR 120/Old Milton Parkway	Mayfield Road	Northmeadow Parkway
Maddox Street	Cogburn Road	Wills Road
Milton Avenue	Windward Parkway	Maxwell Road
		Roswell Street
		Henderson Village Parkway
		Haney Drive
		Cambridge Square
		North fall Lane
		Brady Place
		Devore Road
		Janis Lane
		Marietta Street
		Norcross Street
		Jones Avenue
		Church Street
		Cumming Street
		Powers Place
		Pine Grove Drive
		Vaughn Drive
		Canton Street
		Winthrope Park Drive
		Winthrope Chase Drive
		Water Oak Place

U. S. Route Number(s): N/A **State Route Number(s):** 9

Traffic (AADT):

Base Year: (2012) 36,245 Design Year: (2032) 44,230

Existing design features:

- SR 9/South Main Street – From Upper Hembree Road/Northmeadow Parkway intersection to Fulton County School Bus Access – Five lane urban sections, including twelve foot travel lanes, variable sidewalks width, and a 14 foot flush median.
- SR 9/South Main Street – From Fulton County School Bus Access to Maxwell Road/Roswell Street intersection – Four lane sections with eleven foot travel lanes, variable sidewalks width, and minimal flush median.
- SR 9/South Main Street – From Maxwell Road/Roswell Street intersection to Academy Street/Milton Avenue intersection – Four lane sections (two 11-foot northbound lanes and two 11-foot southbound lanes) with variable sidewalks width.
- SR 9/North Main Street – From Academy Street/Milton Avenue intersection to Mayfield Rd intersection – Four lane sections (two 11-foot southbound lanes and two 11-foot

northbound lanes) with variable sidewalks width.

- SR 9/North Main Street – From Mayfield Road intersection to Canton Street intersection – Four lane section (one 12-foot northbound lane, two 12-foot southbound lanes, and a center lane) with variable sidewalks width.
- SR 9/North Main Street – From Canton Street intersection to Windward Parkway intersection – Two lane section (one 12-foot lane in each direction, as well as right and left turn lanes at certain intersections) with variable sidewalks width.

- **Posted speed**

Posted Speed	15 mph	20 mph	25 mph	30 mph	35 mph	40 mph	45 mph
Mainline							
SR 9/Main Street					X		X
Cross Street							
Upper Hembree Road					X		
Northmeadow Parkway			X				
Haney Drive			X				
Cambridge Square (private)							n/a
Wills Road					X		
Northfall Lane (private)							n/a
Brady Place			X				
Roswell Street					X		
Maxwell Road					X		
Devore Road					X		
Janis Lane (private)			X				
Old Milton Parkway					X		
Maddox Street					X		
Marietta Street					X		
Norcross Street			X				
Jones Avenue			X				
Academy Street					X		
Milton Avenue					X		
Church Street			X				
Cumming Street					X		
Powers Place (private)							n/a
Mayfield Road					X		
Pine Grove Drive			X				
Canton Street					X		
Winthrope Park Drive			X				
Vaughn Drive			X				
Winthrope Chase Drive			X				
Water Oak Place			X				
Henderson Village Parkway			X				
Cogburn Road					X		
Lowe’s Shopping Center			N/A				
Windward Parkway					X		

- **Minimum radius for curve:** 1200
- **Maximum superelevation rate for curve:** 4.0%
- **Maximum grade:** (List mainline, cross roads & driveways)

Existing maximum grade	**0.5 %**	**1 %**	**2 %**	**3 %**	**4 %**	**5 %**	**6 %**	**7 %**	**8 %**	**9 %**	**10 %**	**11 %**	**12 %**
Mainline													
SR 9/Main Street							X						
Cross Street													
Upper Hembree Road											X		
Northmeadow Parkway													X
Haney Drive													X
Cambridge Square (private)													X
Wills Road											X		
Northfall Lane (private)													X
Brady Place													X
Roswell Street											X		
Maxwell Road											X		
Devore Road											X		
Janis Lane (private)													X
Old Milton Parkway											X		
Maddox Street											X		
Marietta Street											X		
Norcross Street													X
Jones Avenue													X
Academy Street											X		
Milton Avenue											X		
Church Street													X
Cumming Street											X		
Powers Place (private)													X
Mayfield Road											X		
Pine Grove Drive													X
Canton Street											X		
Winthrope Park Drive													X
Vaughn Drive													X
Winthrope Chase Drive													X
Water Oak Place													X
Henderson Village Parkway													X
Cogburn Road											X		
Lowe’s Shopping Center													X
Windward Parkway													X
Driveways												X	

- **Width of right-of-way:**

Max Width of right of way	20	30	40	45	50	55	60	65	70	75	80	90	100	110	140
Mainline															
SR 9/Main Street														X	
Cross Street															
Upper Hembree Road											X				
Northmeadow Parkway													X		
Haney Drive					X										
Cambridge Square (private)															n/a
Wills Road							X								
Northfall Lane (private)															n/a
Brady Place		X													
Roswell Street					X										
Maxwell Road							X								
Devore Road							X								
Janis Lane (private)															n/a
Old Milton Parkway															X
Maddox Street															X
Marietta Street		X													
Norcross Street					X										
Jones Avenue	X														
Academy Street									X						
Milton Avenue												X			
Church Street			X												
Cumming Street			X												
Powers Place (private)															n/a
Mayfield Road											X				
Pine Grove Drive							X								
Canton Street							X								
Winthrope Park Drive					X										
Vaughn Drive					X										
Winthrope Chase Drive					X										
Water Oak Place				X											
Henderson Village Parkway							X								
Cogburn Road										X					
Lowe’s Shopping Center															n/a
Windward Parkway													X		

- **Major structures:** None
- **Major interchanges or intersections (existing) along the project:**

Road Name	Interchanges	Intersections
SR 9 at Upper Hembree Road/Northmeadow Parkway		X
SR 9 at Wills Road		X
SR 9 at Roswell Street/Maxwell Road		X
SR 9 at SR 120/Old Milton Parkway/Maddox Street		X
SR 9 at Academy Street/Milton Avenue		X
SR 9 at Cumming Street		X
SR 9 at Mayfield Road		X
SR 9 at Henderson Village Parkway/Cogburn Road		X
SR 9 at Lowe's Shopping Center		X
SR 9 at Windward Parkway		X

- **Existing length of roadway segment and the beginning mile logs for each county segment:**

Project	Begin Mile Point	End Mile Point	Proposed Length
PI 721790-, STP00-0114-01(085), SR 9/South Main Street from Upper Hembree Road to Academy Street	23.37	25.07	1.70
PI 721780-, STP00-0114-01(084), SR 9/North Main Street from Academy Street to Windward Parkway	25.07	27.04	1.97

Proposed Design Features:

- **Proposed typical sections:** SR 9 Typical Section from Upper Hembree Road to Windward Parkway consists of four 11-foot lanes, 4-foot bicycle lanes, with a 17-foot maximum raised (grassed) median, and 11 ½ -foot minimum urban outside shoulders (with 2-foot curb & gutter, 5-foot sidewalks, and variable landscape strip on both sides). Left turn only lanes will be added within the width of the median where required. Right turn only lanes will be added where practical.
- **Proposed Design Speed Mainline:** SR 9 45 mph
- **Proposed Maximum grade Mainline:** 4 % **Maximum grade allowable:** 7 %
- **Proposed Maximum grade Collector:** 10 % **Maximum grade allowable:** 9 %
- **Proposed Maximum grade Local street:** 15 % **Maximum grade allowable:** 15 %
- **Proposed Maximum grade driveway:** 27% Residential, 11% Commercial
- **Proposed Minimum radius of curve:** 1200 ft **Minimum radius allowable:** 711 ft
- **Maximum allowable superelevation rate:** 4.0 %
- **Proposed Maximum superelevation rate:** 4.0 %

- **Right-of-Way:**
  - **Width:** SR 9 varies 92 ft to121 ft
  - **Easements:** Temporary (X) Permanent (X) Utility ( ) Other ( ).
  - **Type of access control:** Full ( ) Partial ( ) By Permit (X) Other ( ).
  - **Number of parcels:** 200 commercial, 5 Residential

Number of displacements:	7
Business:	6
Residences:	1
Mobile homes:	0
Other:	0

- **Structures:**
  - **Bridges:** None
  - **Retaining walls:** Retaining walls may be utilized to minimize right of way impacts to adjacent properties. This will reduce required right of way costs and damages, as well as minimize environmental impacts, which could delay the project significantly. As shown on Attachment 10, Gravity walls are proposed as follows:

Gravity Wall Number	Proposed Location
1, 2	Left side of SR 9 before reaching Haney Drive
3	Left side of SR 9 between Cambridge Square and Wills Road
4, 5, 6	Right side of SR 9 between Wills Road and Brady Place
7, 9	Left side of SR 9 between Brady Place and Maxwell Road
8	Right side of SR 9 between Brady Place and Maxwell Road
10, 11	Right of SR 9 between Old Milton Parkway and Marietta Street
12, 13	Left side of SR 9 between Marietta Street and Norcross Street
14	Right side of SR 9 between Marietta Street and Norcross Street
15, 16, 17	Right side of SR 9 between Norcross Street and Academy Street
18	Right side of SR 9 between Academy Street and Church Street
19A	Left side of SR 9 between Church Street and Cumming Street
19	Right side of SR 9 between Church Street and Cumming Street
20, 21, 22	Left side of SR 9 between Mayfield Road and Pine Grove Drive
23, 24, 29, 32	Right side of SR 9 between Pine Grove Drive and Canton Street
25, 26, 27, 28, 30, 31, 33, 34, 35	Left side of SR 9 between Pine Grove Drive and Canton Street
36	Right side of SR 9 between Canton Street and Winthrope Park Drive
37	Right side of SR 9 between Vaughn Drive and Winthrope Chase Drive
38, 39	Left side of SR 9 between Winthrope Chase Drive and Water Oak lane
40, 41, 42	Right side of SR 9 between Henderson Village Parkway and Windward Parkway
43, 44	Left side of SR 9 between Cogburn Road and Windward Parkway
45	Left side of SR 9 after Windward Parkway

- **Major interchanges or intersections:**

Road Name	Interchanges	Intersections
SR 9 at Upper Hembree Road/Northmeadow Parkway		X
SR 9 at Wills Road		X
SR 9 at Roswell Street/Maxwell Road		X
SR 9 at SR 120/Old Milton Parkway/Maddox Street		X
SR 9 at Academy Street/Milton Avenue		X
SR 9 at Cumming Street		X
SR 9 at Mayfield Road		X
SR 9 at Henderson Village Parkway/Cogburn Road		X
SR 9 at Lowe's Shopping Center		X
SR 9 at Windward Parkway		X

- **Median Openings and Signal Locations:**

Road Name	Proposed		Existing Signal Location
	Median Opening	Signal Location	
SR 9 at Upper Hembree Road/Northmeadow Parkway	X	X	X
SR 9 at Cambridge Square	X		
SR 9 at Wills Road	X	X	X
SR 9 at Northfall Lane	X		
SR 9 at Fulton County School Bus Parking Lot	X		
SR 9 at Roswell Street/Maxwell Road	X	X	X
SR 9 at Relocated Roswell St/Devore Road	X	X	
SR 9 at SR 120/Old Milton Parkway/Maddox Street	X	X	X
SR 9 at Academy Street/Milton Avenue	X	X	X
SR 9 at Cumming Street	X	X	X
SR 9 at Mayfield Road	X	X	X
SR 9 at Medical Complex	X		
SR 9 at Canton Street	X		
SR 9 at Vaughn Drive	X		
SR 9 at Water Oak Place	X		
SR 9 at Henderson Village Parkway/Cogburn Road	X	X	X
SR 9 at Lowe's Shopping Center	X	X	X
SR 9 at Windward Parkway	X	X	X

- **Transportation Management Plan Anticipated:** Yes (X) No ( )

- **Design Exceptions to controlling criteria anticipated:**

	YES	NO	UNDETERMINED
HORIZONTAL ALIGNMENT:	( )	(X)	( )
LANE WIDTH:	( )	(X)	( )
SHOULDER WIDTH:	( )	( )	(X)
VERTICAL GRADES:	(X)	( )	( )
CROSS SLOPES:	( )	(X)	( )
STOPPING SIGHT DISTANCE:	( )	(X)	( )
SUPERELEVATION RATES:	( )	(X)	( )
VERTICAL ALIGNMENT:	( )	(X)	( )
SPEED DESIGN:	( )	(X)	( )
VERTICAL CLEARANCE:	( )	(X)	( )
BRIDGE WIDTH:	( )	(X)	( )
BRIDGE STRUCTURAL CAPACITY:	( )	(X)	( )
LATERAL OFFSET TO OBSTRUCTION:	( )	(X)	( )

- **Design Exceptions/Variances Expected:**
  A Design Exception for shoulder width is listed as Undetermined due to the possibility of relocating existing utility poles on the urban shoulder where practical, and the potential for amenities such as Wayfinding Signage on the downtown area of the City of Alpharetta. Also, a design exception is anticipated for using 15% proposed maximum grade on some local streets to tie-in to an existing 12% grade. A Design Variance is anticipated for providing a 17 foot raised median. The current criteria requires 20 to 24 foot raised median.
- **Environmental concerns:**
  - Multiple UST's are located within the project limits and will require UST/Hazardous Materials Reports (See Attachment 11d).
  - Six historic resources were identified as eligible for inclusion in the National Register of Historic Places. Each of these six properties requires easement, and three may require additional right of way. Attachment 11e contains a summary of issues relating to trees within the boundaries of four historic resources and recommendations to resolve the issues, with the overall goal of avoiding adverse effects to historic properties and ultimately Section 4(f) impacts.
- **Anticipated Level of environmental analysis:**
  - Are Time Savings Procedures appropriate? Yes ( ) No (X)
  - Categorical exclusion anticipated ( ).
  - Environmental Assessment/Finding of No Significant Impact anticipated (FONSI)(X)
  - Environmental Impact Statement (EIS) ( ).
- **Utility involvements:**

Utility Company	**Utility Company**
City of Alpharetta Traffic	Fiber Light
City of Atlanta Watershed Management	Fulton County Public Works
American Fiber Systems	Georgia Power Distribution
AT&T Communication, Inc. (Legacy)	Georgia Power Company – Transmission
Atlanta Gas Lights – Natural Gas	Georgia Transmission Corporation
AGL Networks	Level 3 Communications
BellSouth – Telecommunications	MCI Telecommunications Corporation
Comcast Communication	Sawnee EMC
Charter Communication	XO Communications

- **VE Study Anticipated:** Yes (X) No ( ) (VE Study approved on 12-09-2009, see Attachment 15 for VE Implementation Report)
- **Benefit/Cost Ratio (see Attachment 12 for details):**

Project	Benefit/Cost Ratio (Design)
STP00-0114-01(084), PI# 721780-	1.32
STP00-0114-01(085), PI# 721790-	1.89

Project Cost Estimate and Funding Responsibilities:

	PE	ROW	UTILITY	CST*	**ECOLOGY MITIGATION
By Whom	GDOT	GDOT	LOCAL	GDOT	GDOT
721780-	$1,945,080	$24,727,900	N/A	$10,355,922	None
721790-	$1,980,414	$26,902,800	N/A	$9,016,184	None
$ Amount	$3,925,494	$51,630,700	N/A	$19,372,106	None

**CST Cost includes: Construction, Engineering and Inspection, Fuel Cost Adjustment, and Asphalt Cement Cost Adjustment, See Attachment 1. ** No ecology mitigation or credits will be required for this project: (1) Wetland Mitigation - since wetland impacts greater than 0.10 acre will not occur as result of the proposed project, wetland mitigation is not required. (2) Stream Mitigation - since stream impacts greater than 100 feet will not occur as result of the proposed project, stream mitigation is not required.*

Project Activities Responsibilities:

- Design: GDOT
- Right-of-Way Acquisition: GDOT
- Right-of-Way funding (real property): GDOT
- Relocation of Utilities: TBD
- Letting to contract: GDOT
- Supervision of construction: GDOT
- Providing material pits: Contractor
- Providing detours: GDOT
- Environmental Studies/Documents/Permits: GDOT
- Environmental Mitigation: GDOT

Coordination

- Initial Concept Team Meeting: March 11, 2009 (See Attachment 7 for Meeting Minutes)
- Final Concept Team Meeting: October 6, 2009 (See Attachment 8 for Meeting Minutes)
- P.A.R. meetings, dates and results: N/A
- FEMA, USCG, and/or TVA: N/A
- Public involvement:
  - February 16, 2010 – PIOH in Alpharetta. A total of 73 people attended the Public Information Open House (PIOH) held for the twin projects on February 16, 2010 at Alpharetta Public Works Office, located at 1790 Hembree Road, Alpharetta, Georgia. A total of 95 comments were received at the open house and during the ten-day comment period, which was extended to 14 days, following the PIOH. Of the comments received,

63 opposed, 11 in support, 6 uncommitted, and 15 conditional. The vast majority of the comments received that were against, uncommitted or conditional were opposed to the raised median, lack of median opening, lack of signal installation, and worries about impact to the character and business economy of downtown Alpharetta. Representatives from the City of Alpharetta, City of Milton, GDOT, Pond & Company, and Edwards-Pitman Environmental attended the meeting, see Attachment 9a.

- March 16, 2010 – Leaders of a group called Downtown Alpharetta Trade Association (DATA), which represent the business community along the downtown Alpharetta, met with Peter Emmanuel and Scott Lee to voice their concerns about the twin projects impact to the business community, see Attachment 9b for the meeting minutes.
- May 18, 2010 – PIOH in Alpharetta. A total of 127 people attended the Public Information Open House (PIOH) held for the twin projects on May 18, 2010 at Alpharetta City Hall, located at 2 South Main Street, Alpharetta, Georgia. A total of 41 comments were received at the open house and during the ten-day comment period following the PIOH. Of the comments received, 23 opposed, 6 in support, 1 uncommitted, and 11 conditional. The vast majority of the comments received that were against, uncommitted or conditional were opposed to the raised median, lack of median opening, lack of signal installation, and worries about impact to the character and business economy of downtown Alpharetta. Representatives from the City of Alpharetta, City of Roswell, GDOT, Pond & Company, and Edwards-Pitman Environmental attended the meeting, see Attachment 9c.

- Local government comments:
  - The City of Alpharetta met with GDOT on June 6th, 2008 to discuss the proposed twin projects, and introduced the City's Downtown Circulation Study (LCI, see Attachment 11b) to GDOT for coordination. Alpharetta has hired GDOT design consultant, Pond & Company, to design its LCI project.
  - The City of Alpharetta is in support of the twin projects, and made it fully known in a letter of support dated August 10, 2010, see Attachment 9d.
- Other projects in the area:
  - The City of Alpharetta is currently implementing its LCI plan along SR 9 through downtown Alpharetta.
  - PI 0006727 is an ongoing ITS improvement project along SR 9 from Abernathy Road to the Forsyth Co. line
- Railroads: N/A
- Other coordination to date: None
- A Public Hearing will be required as part of the plan development process

Scheduling – Responsible Parties' Estimate

- Time to complete the environmental process: Base Finish – September 2011.
- Time to complete preliminary construction plans: Base Finish – September 2013.
- Time to complete right-of-way plans: Base Finish – August 2014.
- Time to complete the Section 404 Permit: N/A
- Time to complete final construction plans: Base Finish – November 2016.
- Time to complete to purchase right-of-way: Base Finish – November 2016.

- List other major items that will affect the project schedule: 3 Months
    - The businesses along the twin projects may request for another Public Involvement meeting (such as PIOH) to discuss the incorporation of context sensitive design into the twin projects. Any public involvement meeting will affect the environmental process. On these projects, it has take approximately 3 months to plan and hold a public information meeting, collect comments, respond to the comments, and mail the responses to commenter.

Other alternates considered:

- Alternative A - No Build – No action would be taken to improve current conditions.

Comments:

- **Project Prioritization:** The Georgia Department of Transportation (GDOT) Office of Planning has compiled a planning level study (project prioritization) to assist with project balancing and programming using a macro-analysis tool, the data in Table 3 is the result of the study. As a result of the high planning Benefit/Cost Ratio (B/C Ratio), STP00-0114-01(084) and STP00-0114-01(085) have been moved to Tier 1.

Table 3 - Project Prioritization Information

P.I.#	721780-	721790-
Tier #	1	1
Score #	42	45
B/C Ratio	3.79	7.02
Reduces delay by (VHT)	1092 hrs	1483 hrs

- **VE Incorporation:** The VE Study was held and concluded prior to the two most recent PIOHs; as a result, this concept report incorporates all practical changes requested per the approved VE Study Implementation Report. Changes such as VE Implementation Item G-1 was not implemented due to public input that led to additional median openings, as a result, a continuous 8’ median was removed (see Attachment 15 for the VE Implementation Report).
- **Logical Termini:** A logical termini discussion was held on April 1, 2010 with FHWA Environmental specialist, Jennifer Giersch, and the result of the meeting yielded a satisfactory understanding. Per Jennifer’s instruction, the Department is to include a logical termini justification in the logical termini section of the Environmental Document, EA. This Concept Report’s need and purpose logical termini section is consistent with the Draft Environmental Assessment, (DEA), which was submitted for the Department review on October 18, 2010.

- **Attachments:**
  1. Detailed Cost Estimates:
     a. Project Cost Estimate Summary including Engineering and Inspection
     b. Construction
     c. Right-of-Way
     d. Utilities
     e. Completed Fuel/Asphalt price adjustment form
  2. Sketch location map
  3. Typical Sections
  4. Traffic Engineering Technical Memorandum
  5. Traffic Diagrams. (Approved March 17, 2010)
  6. Capacity Analysis Summary
  7. Initial Concept Team Meeting
  8. Final Concept Team Meeting
  9. Minutes of Meetings showing support or objection to the concept
     a. PIOH Held February 16, 2010
     b. Meeting Held with DATA March 15, 2010
     c. PIOH Held May 18, 2010
     d. City of Alpharetta Letter of Support, August 10, 2010
        GDOT Letter of reply, August 18, 2010
     e. Initial Draft Concept Report Review
  10. Concept Layout.
  11. Other items referred to in the body of the report
      a. PI 0008357 Planning Preliminary NP Statement
      b. Alpharetta LCI Study
      c. Joint GDOT & Alpharetta PIOH Display
      d. UST/Hazardous Waste Site
      e. Historic Resource Issues July and August 2010
  12. Benefit Cost Analysis
  13. Signal Warrant Screening, August 4, 2010
  14. Conceptual Stage Study, August 30, 2010
  15. SR 9 VE Implementation Report, Approved December 9, 2009.
  16. Conforming Plan's Network Schematics showing Thru Lanes

Exempt projects

Concur: _____
Director of Engineering

Approve: _____ Date: 05/04/2011
Chief Engineer